

# High Water Update

April 21, 2021

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# Mississippi River and Tributaries

- 41% of all water in U.S.
- World's 3rd largest watershed
- MR&T system includes over 2200 miles of levees and floodwalls





# Mississippi River and Tributaries

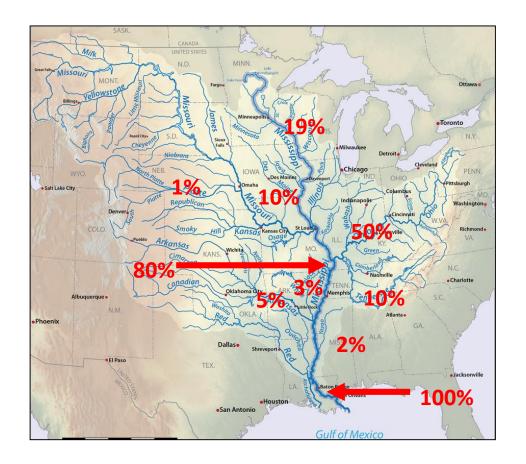
### Percentage of Flow

Upper Mississippi 80%

Platte – 1% Missouri – 10% Mississippi – 19% Ohio – 50%

Lower Mississippi 20%

White – 3%
Tennessee – 10%
Arkansas - 5%
Yazoo – 2%





## **Lower Mississippi Flood Potential Summary**

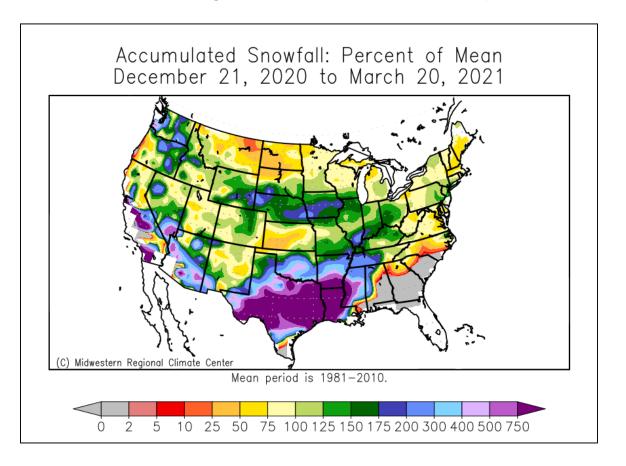
National Weather Service

- Flood risk can be characterized as near normal over the Lower Mississippi and Tennessee Valleys.
- Minor flooding with isolated moderate flooding is possible for portions of the Lower Mississippi, Lower Ohio, and Atchafalaya Basins.
- Minor flooding with isolated moderate flooding is possible over the remaining tributaries in the Lower Mississippi Valley.
- Snowmelt is not a significant factor this year. The frequency, intensity, and extent of rainfall will ultimately determine the final outcome of flood risk for this Spring.

### Winter Snowfall

### Midwestern Regional Climate Center

Snowmelt is not a significant factor this year

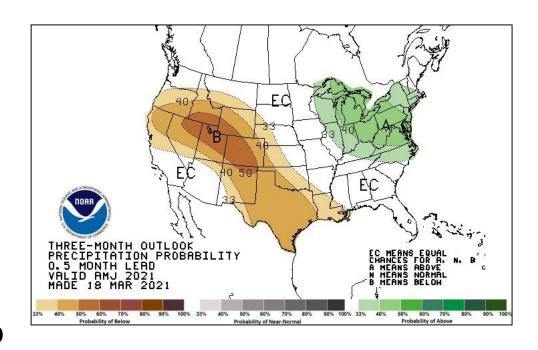




## **Precipitation Probability – Three Month Outlook**

#### Climate Prediction Center

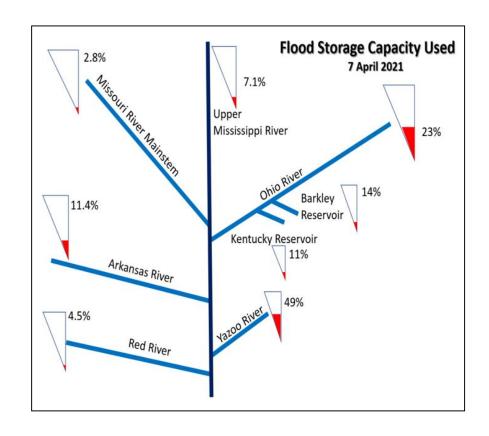
- Frequency, intensity, and extent of rainfall will determine flood risk this spring
- Low confidence in precipitation chances for central areas
- Above normal for Ohio River basin
- Below normal for Red River basin





# **USACE Flood Storage Capacity**

- USACE manages the water through the Mississippi system
- Available flood storage capacity is similar to last year
- Flood control projects have available flood storage capacity throughout the system

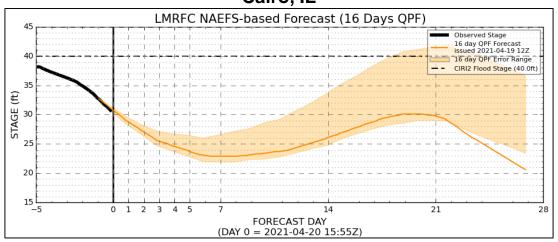




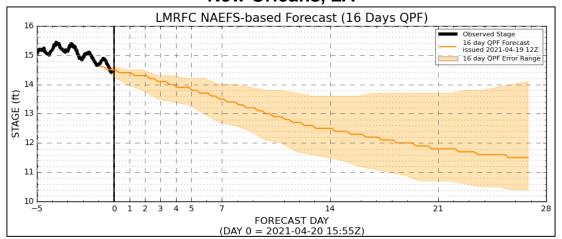
# Mississippi River 28-Day Forecast

### National Weather Service

Cairo, IL



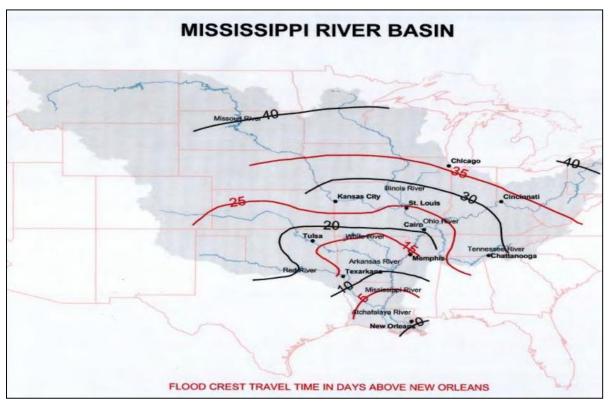
#### **New Orleans, LA**





### **Flood Crest Travel Times**

- 40 days: Upper Mississippi and Ohio River basins to New Orleans
- 10 days:
   Arkansas River
   to New Orleans
- 5 days: Northern Louisiana to New Orleans







### Consecutive Days Above Flood Stage

Lower Mississippi River Forecast Center

Current data as of Jun 26, 2020

Forecast Location	Record (Days/Year)	2020 (Days/Period)	2019 (Days)	1973 (Days)	1927 (Days)
Cairo, IL	156 2019	<b>97</b> Feb 7 <sup>th</sup> – May 13 <sup>th</sup>	156	97	76
Memphis, TN	65 1927	<b>16</b> Mar 28 <sup>th</sup> – Apr 12 <sup>th</sup>	39	64	65
Arkansas City, AR	197 1927	37 Mar 24 <sup>th</sup> – Apr 29	94	72	197
Greenville, MS	155 2019	41 Mar 23 <sup>rd</sup> – May 2 <sup>rd</sup>	155	71	115
Vicksburg, MS	185 1927	<b>96</b> Feb 13 <sup>th</sup> – May 20 <sup>th</sup>	162	83	185
Natchez, MS	215 2019	160 Jan 14th – Jun 21st	215	90	77
Red River Landing, LA	<b>227</b> 2019	<b>165</b> Jan 13 <sup>th</sup> – Jun 25 <sup>th</sup>	227	95	152
Baton Rouge, LA	211 2019	156 Jan 18th – Jun 21st	211	99	135

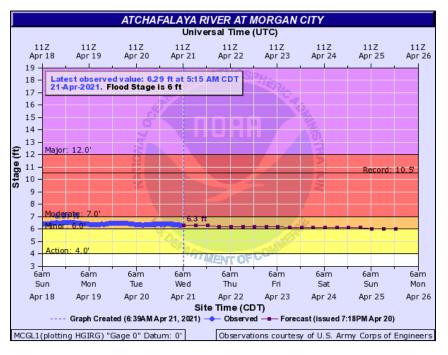
Numbers in feed are records for 2019

Data provided by U.S. Army Corps of Engineers



## Lower Mississippi River Hydrographs

#### National Weather Service







# **Flood Fight Triggers**

#### Phase I

- Mississippi River: 11 feet and rising at Carrollton Gauge
- Teams inspect the levee system 1-2 times per week
- Permitted work within 1500-ft of levee center line needs waiver





# **Flood Fight Triggers**

#### Phase II

- Mississippi River: 15 feet and rising at Carrollton Gauge
- Teams inspect the levee system daily (973 miles)
- All excavations within 1500-ft of the levee centerline must stop





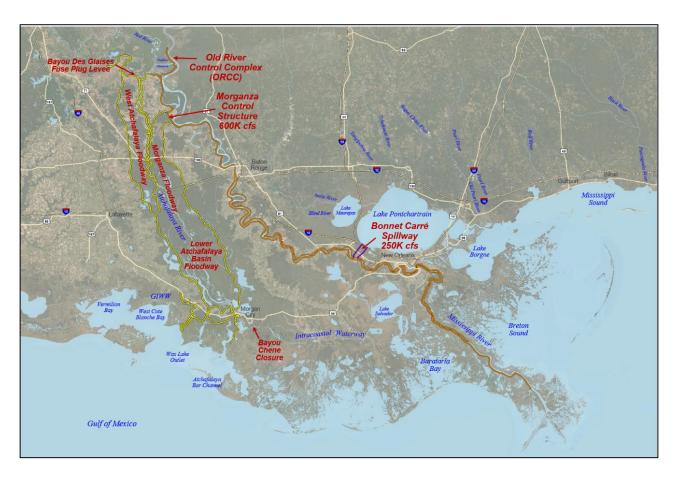
## Flood Control Structures

#### **Bonnet Carré Spillway**

- Purpose: Maintain design flows of 1.25 million cfs or less through New Orleans
- Opening Trigger: 1.25 million cfs

#### Morganza Floodway

- Purpose: Maintain design flows of 1.5 million cfs or less through Baton Rouge
- Opening Trigger: 1.5 million cfs





## Flood Control Structures

#### **Bayou Chene Closure**

- Purpose: Prevent backwater flooding from the Atchafalaya River into St. Mary, St. Martin, Terrebonne, Assumption, Iberville, and Lafourche parishes.
- Closing Trigger: EL 7.0 (MLG) @ Morgan
   City





